Designed to serve

Summary

Academics and practitioners alike state that we are experiencing the fourth industrial revolution, characterized by new technologies (e.g., Robots, Internet of Things, Artificial Intelligence) radically changing the ways in which and with whom consumers co-create value. As service systems increase in their complexity due to the proliferation of robotic actors exhibiting human-like mind and behavior, there is a need for a better understanding of how such anthropomorphized automation affects actors who are an integral part of these complex service systems. This dissertation takes an interdisciplinary perspective, combining knowledge from service marketing and management, service design, robotics, and social psychology, to enhance the scholarly understanding of and provide practical implications to diverse set of stakeholders regarding users' i) personal values activated by the robot's value proposition, ii) evaluations of the robot's value co-creation and co-destruction potential, and iii) social perceptions of robotic actors.

Chapter 2 introduces the conceptual foundations and the iterative framework of value co-creation/destruction of social robots in services. In this chapter, robots are conceptualized as systems of affective and cognitive resources that affect users' personal values, which in turn can positively or negatively affect the robot's acceptance. I illustrate the four different social robot types (i.e., mechanical, thinking, and feeling robot, and robo-sapiens) through a matrix of varying affective and cognitive resources. I suggest that robots' value propositions make actors' personal values salient and activate users' universal dimensions of social cognition (i.e., warmth and competence) which are important for further expectations of robots' value co-creation/destruction potential. Finally, I suggest that users accept or reject social robots based on their evaluations of robots' instrumentality to value realizations. The chapter ends with a future research agenda which offers relevant, conceptually robust directions for stimulating the advancement of knowledge and understanding in this nascent field.

Chapter 3 brings the attention to the activation of users' personal values, arguing that existing service management and design tools for network mapping do not completely capture users' idiosyncratic understanding of value and value-creating networks. I further elaborate on the benefits of user participation in mapping activities and highlight the importance of allowing users to freely map their understanding of networks for the comprehensive elicitation of basic human values within disrupted network contexts. This empirical study introduces

Contextual Value Network Mapping – a generative cards mapping activity – as a tool for visualizing actor networks, where nodes represent social and quasi-social actors (e.g., robots), while edges contain information about value co-creation/destruction practices in current and future network scenarios. My analysis of 20 network visualizations reveals three distinct network archetypes (i.e., focalized, hierarchical, and bundled) and underlying dominant personal values. With this approach, I expand the service design toolbox; hence, the primary contribution is of a methodological nature. Furthermore, this chapter introduces the concept of service resonance and offers strategies to account for the pluralistic perspectives of the network actors.

Chapter 4 examines users' expectations of the socially assistive robot's value co-creation/destruction potential and investigates the potential roles for robots in elderly care networks. This empirical chapter employs in-depth phenomenographic interviews combined with a generative card activity with 20 elderly people to elicit informants' evaluations of current and expectations of future service scenarios in which robots will assume some of the caring tasks and roles. My findings demonstrate that elderly people find socially dexterous robots comparable to human caring actors. Specifically, the robots invoke perceptions of anthropomorphized functions (i.e., safeguarding, social contact, and cognitive support) and roles (i.e., enabler, intruder, ally, replacement, extended self, and deactivator). By acknowledging both value co-creation and co-destruction counterparts and by adopting a network-conscious lens (i.e., distinguishing the importance of the robot's role on a network versus an individual level), I extend existing role conceptualizations and offer practical guidance for mitigating hindrances to network value realizations. In that way, I substantially contribute to service research, in particular to a better understanding of value co-creation with social robots in services.

Chapter 5 investigates the (social) psychology of elderly people and compares their social perceptions of human versus robotic coaches in the context of an active, healthy ageing program. An empirical model is tested through field experiments involving 58 elderly participants in a real-life setting (i.e., elderly care facilities). This study leverages a mixed-method approach, combining quantitative and qualitative data. My findings reveal several contributions to service research, accompanied by strong practical implications. I show that i) socially assistive robots make elderly people feel like they are in the company of a social entity (i.e., the activation of automated social presence); ii) elderly participants evaluate human coaches higher on perceived warmth and competence relative to robotic coaches; iii) social cognition plays an important role in the overall exercising experience (i.e., elderly people's emotional and

cognitive evaluations of the exergame and their behavioral intent to continue playing in the future). These findings inform future developments and design of social robots and systems for their smoother inclusion in the elderly people's social networks. Particularly, I suggest that socially assistive robots can help improve elderly people's physical and psychosocial well-being by assisting human caregivers through their complementary motivational roles.

This dissertation addresses a societally relevant topic of value co-creation and co-destruction with social robots in elderly care services. My findings suggest an optimistic outlook on future robotic services and their role in ensuring the well-being of elderly people and their care-providing networks. I highlight the importance of aligning robotic designs with human values and users' mental models through human-centered, iterative, and holistic service design in order to maximize the value co-creation potential and minimize the value co-destruction potential.